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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,190	07/03/2006	Hiroyuki Suenobu	128623	9209
27049	7590	12/10/2009		
OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850			EXAMINER LOPEZ, CARLOS N	
			ART UNIT 1791	PAPER NUMBER
			NOTIFICATION DATE 12/10/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction27049@oliff.com
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Office Action Summary

Application No.

10/585,190

Applicant(s)

SUENOBUT ET AL.

Examiner

CARLOS LOPEZ

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of claims 1-7 in the reply filed on 9/18/09 is acknowledged. The traversal is on the ground(s) that the search for both groups of claims can be made without a serious burden because the search for the elected subject matter would encompass the search for the remaining claims. This is not found persuasive because as noted in MPEP section 803, "For purposes of the initial requirement, a serious burden on the examiner may be prima facie shown if the examiner shows by appropriate explanation of separate classification, or separate status in the art, or a different field of search as defined in MPEP § 808.02." Since applicant has not rebutted the prima facie shown by appropriate showing or evidence as noted in MPEP 803, except for the argument noted above, applicant's argument is found unpersuasive.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

Claims 2-6 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The subject matter of claim 1 is drawn to positive active steps for producing a cordierite honeycomb structure. The limitations of claims 2-6 do not recite positive active steps that further define the process of claim 1 but instead recite properties of the honeycomb structure.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Dependant claims 2-6 recite properties of the honeycomb structure. It is indefinite as to what positive active limitations are being sought by merely reciting properties.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Beall et al (US 5,114,644). Beall discloses a method of making cordierite honeycomb structures. See Col. 1, lines 13-16. The

process comprises firing the honeycomb from a first temperature of about 1200°C to a second temperature of about 1450°C. See Col. 4, lines 40-61. The heating rate between the first and second temperature is not greater than *about* 50°C/hr as noted in Col. 4, line 50. An embodiment of claim 1 encompasses firing the honeycomb structure from a first temperature of 1200°C to a second temperature of 1400°C at a heating rate of 40 °C/hr. In view that Beall teaches of heating the honeycomb structure within the claimed temperature range at a heating rate of *about* 50°C/hr, it is deemed that about 50°C/hr anticipates the claimed 40°C/hr heating rate. Alternatively, it would have been within the grasp of a person of ordinary skill in the art to have used a heating rate of 40°C/hr in view that Beall envisage using the claimed heating rate by qualifying that the heating rate be *not greater than about* 50°C/hr. This qualification of the heating rate at 50°C/hr provides a person of ordinary skill to have used the now claimed 40°C/hr with reasonable expectation of success.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beall et al (US 5,114,644) in view of Frost et al (US 4,420,316). Beall is silent disclosing the plugging of the honeycomb structure that is used as part of catalytic converters filter for cars. However, Frost teaches that honeycomb structures used as filters for cars are conventionally plugged with a slurry either before or after sintering/firing the honeycomb. See Col. 4, lines 9-11 and Col. 6, lines 33-52. Hence, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have plugged the honeycomb structure, either prior or after firing as taught by Frost, in order to use the structure as sought by Beall, a car gas exhaust filter.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARLOS LOPEZ whose telephone number is (571)272-1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carlos Lopez/
Primary Examiner
Art Unit 1791